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Emergency Planning and Community Right-To-Know Act Section 313

Toxic Release Inventory Reporting

Questions & Answers Update

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United States Department of Energy
Office of Environmental Policy and Guidance
RCRA/CERCLA Division (EH-413)

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Environmental Guidance

Emergency Planning and Community Right-To-Know Act Section 313 Toxic Release Inventory Reporting

Questions & Answers Update

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Introduction

The purpose of this environmental guidance is to address specific questions posed by DOE Field Elements regarding DOE facility TRI reporting requirements under the Emergency Planning and Community Right-to-Know Act (EPCRA) Section 313, which is the legislation that established the Toxic Chemical Release Inventory (TRI). Federal facilities are required to report under EPCRA Section 313 by Executive Order (E.O.) 13148 issued in April 2000. E.O. 13148 does not alter or remove any existing legal obligation of the private contractor of a government-owned, contractor-operated (GOCO) Federal facility to report.

On October 28, 1999, the Environmental Protection Agency (EPA) issued a final rule entitled "Persistent Bioaccumulative Toxic (PBT) Chemicals; Lowering of Reporting Thresholds for Certain PBT Chemicals; Addition of Certain PBT Chemicals." (64 FR 58666) EPA clarified that the new reporting thresholds for PBT chemicals were effective with the 2000 reporting year. Based on PBT-related questions raised by DOE's TRI focus group, the Office of Environmental Policy and Guidance, EH-413, has developed a Q&A Guide on TRI PBT reporting scenarios that might be common to sites across the complex. This Q&A Guide is a continuing series of questions and answers on the topic, building upon EH-413's initial guidance issued March 1994 entitled *Toxic Chemical Release Inventory Reporting Qs&As.* Subsequent TAP guidance includes *EPCRA Section 313 TRI Reporting Q&A Update*, September 1997 and *EPCRA Section 313 TRI Reporting Q&A Update*, May 1999. DOE facilities should also refer to EPA's *1998 EPCRA Section 313 Question and Answer Document* and the *Addendum for Federal Facilities, Revised 1999 Version.* These are available at: http://www.epa.gov/tri/guidance.htm .

This Q&A Guide has been coordinated with EPA; comments received have been incorporated and are greatly appreciated. One issue not addressed by EPA is a definition of "like" article under the article exemption. EPA has not specifically defined the term "like" article nor has it endorsed an interpretation initially drafted by DOE. EPA has suggested that DOE use existing EPA guidance for an interpretation. This includes EPA's Directive #1 - *Article Exemption* and Directive #6 - *PCBs Threshold Determination and Release and Other Waste Management Reporting* found in EPA's 1998 Q&A document mentioned above. DOE sites are encouraged to use these sources for identifying "like" articles.

DOE TRI Questions and Answers for Reporting Year 2000

Q **In reporting year 2000, a site disposed of or recycled about 35,000 fluorescent light bulbs. The light bulbs contain mercury vapors and a lead button. The light bulbs are taken out of service and sent to a central storage area prior to being shipped off-site. Some of the light bulbs are broken after being removed from service. Some of the light bulbs are shipped to an off-site sanitary landfill for disposal (they passed the TCLP test and are not considered a hazardous waste), and the remainder are shipped off-site to a recycler. What needs to be reported under EPCRA Section 313?**

A Once the bulbs are removed from use they are stored prior to being shipped off-site for disposal or recycling. Storage of a listed chemical is not considered a manufacturing, processing or otherwise use activity, and therefore does not count toward threshold determinations. However, if the facility exceeds a reporting threshold for mercury or lead during some other covered activity at the facility, the facility must report releases and other waste management activities for mercury and lead from all non-exempted activities including that contained in the stored light bulbs. The facility must also consider the amount of lead and mercury in storage when calculating the maximum amount on-site during the year, unless the article exemption is being utilized.

It should be noted that, beginning in the reporting year 2000, mercury is classified as a persistent, bioaccumulative and toxic (PBT) chemical, and the manufacture, process or otherwise use reporting threshold is 10 pounds per year. Since mercury is a PBT chemical, EPA requires that releases and other waste management quantities greater than 0.1 pound per year be reported, provided the accuracy and the underlying data on which the estimate is based supports this level of precision. In reporting year 2000, the reporting thresholds and requirements for lead remain unchanged.

Q A DOE facility uses mercury as a pumping mechanism for tritium. Every month the mercury is drained from the pumps, put into drums, cleaned and then put back into the pumps. The mercury is not necessarily put back into the same pump, and all pumps are serviced during the year. No new mercury is added to the facility's stock of mercury. Can the article exemption be taken for the mercury pumps thus exempting them from threshold determinations and reporting under EPCRA Section 313?

A No, the mercury pumps can not be considered articles because the removal of the mercury from the pump negates the article exemption (See EPA Directive #6, *PCBs Threshold Determination and Release and Other Waste Management Reporting.)* The mercury in the pumps is considered to be equivalent to PCBs in PCB transformers. However, in the answer to question 379 of EPA's *1998 EPCRA Section 313 Questions and Answers*, regarding PCB transformers, EPA states that "to determine if the facility exceeds a threshold, the operator of the facility must count the amount of the chemical added to the recycle/reuse operation during the reporting year (40 CFR Section 372.25(e))." Since the site adds no new mercury to this recycle/reuse operation, the facility is not required to con sider the amount of mercury removed and then returned to the pump towards a reporting threshold. Any releases or other waste management of the mercury during this or other covered site activity must be reported if the facility exceeds the 10 pound reporting threshold for mercury elsewhere at the facility.

If the facility adds mercury to their recycle/reuse operation, the facility would be otherwise using the mercury added. Only the amount of mercury added to the pump should be counted toward the other wise use thershold.

Q A DOE site utilizes lead as shielding in radiation experiments. The site has several different experimental areas, one of which is below-ground level. Some of the lead is being stored and some is in active use. The soil around the lead shielding storage area is contaminated with lead. In the below-ground level location it is believed that groundwater contact has resulted in lead releases to water and soil in the bottom of sumps. The site also shipped in excess of 10,000 pounds of lead shielding off-site for recycling in reporting year 2000.

Can the article exemption be taken for any of this lead shielding? If not, how should the facility report under EPCRA Section 313?

A Lead shielding that meets the criteria for the article exemption would be exempt from threshold determi nations and reporting. To qualify as an article, the shielding must be a manufactured item: (1) which is formed to a specific shape or design during manufacture; (2) which has end use functions dependent in whole or in part upon its shape or design; and (3) which does not release a toxic chemical under normal conditions of processing or otherwise use of the item at the facility.If the amount of lead released from otherwise using the lead shielding and all *like articles* is equal to or less than a half pound, this amount can be rounded to zero. Thus, the article exemption would be maintained. The half-pound limit does not apply to each individual article, but applies to the sum of all amounts released during processing or otherwise use of all *like* items over the entire reporting year (see Q. 345 in the *1998 EPCRA Section 313 Questions and Answers*.)

If the lead shielding in the below-ground experimental area is ineligible for the article exemption (be cause releases are greater than a half pound), then the amount of lead contained in the lead shielding in this experimental area would need to be considered in otherwise use threshold determinations and release and other waste management calculations.

Storage of lead shielding is not considered a manufacturing, processing or otherwise use activity and, therefore, does not count toward reporting threshold determinations. However, if the facility exceeds a reporting threshold for lead elsewhere at the facility, the facility must report all non-exempt releases and other waste management activities for lead including lead shielding being stored. The facility must also consider the amount of lead in storage when calculating the maximum amount on-site during the year unless an article exemption is being utilized.

If the stored lead shielding shipped off-site in 2000 qualified for the article exemption (see the three condi tions above), the lead would not count toward any threshold and would not be reported as recycled off-site, even if reporting of lead were required due to some other activity at the facility. However, if the lead shielding did not qualify for the article exemption, the lead sent off-site for recycling would be reported in Sections 6.2 and 8.5 of the Form R.

Questions of policy or questions regarding policy decisions will not be dealt with in EH-413 Question and Answer Guides unless that policy already has been established through appropriate documentation. Please refer any questions concerning the subject material covered in these Questions and Answers to:

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